

FORM PTO-1390 (Modified) U.S. PATENT AND TRADEMARK OFFICE; U.S. DEPARTMENT OF COMMERCE  
(REV. 2-2005)

ATTORNEY'S DOCKET NUMBER

## TRANSMITTAL LETTER TO THE UNITED STATES

37404-1

DESIGNATED/ELECTED OFFICE (DO/EO/US)

U.S. APPLICATION NO. (If known, see 37 CFR 1.5)

CONCERNING A SUBMISSION UNDER 35 U.S.C. 371

10/534,836

INTERNATIONAL APPLICATION NO.

INTERNATIONAL FILING DATE

PRIORITY DATE CLAIMED

PCT/JP2003/014528

14 November 2003 (14.11.03)

15 November 2002 (15.11.02)

TITLE OF INVENTION

EXON 1B OF PDGF RECEPTOR GENE AND UTILIZATION THEREOF

APPLICANT(S) FOR DO/EO/US

IMOTO, Masaya; MINATO, Yusuke; TASHIRO, Etsu

Applicant herewith submits to the United States Designated/Elected Office (DO/EO/US) the following items and other information:

1. ☐ This is a **FIRST** submission of items concerning a submission under 35 U.S.C. 371.
2. ☒ This is a **SECOND** or **SUBSEQUENT** submission of items concerning a submission under 35 U.S.C. 371.
3. ☐ This is an express request to begin national examination procedures (35 U.S.C. 371(f)). The submission must include items (5), (6), (9) and (24) indicated below.
4. ☐ The US has been elected (Article 31).
5. ☐ A copy of the International Application as filed (35 U.S.C. 371 (c)(2))
  - a. ☐ is attached hereto (required only if not communicated by the International Bureau).
  - b. ☐ has been communicated by the International Bureau.
  - c. ☐ is not required, as the application was filed in the United States Receiving Office (RO/US).
6. ☐ An English language translation of the International Application as filed (35 U.S.C. 371(c)(2)).
  - a. ☐ is attached hereto.
  - b. ☐ has been previously submitted under 35 U.S.C. 154(d)(4).
7. ☐ Amendments to the claims of the International Application under PCT Article 19 (35 U.S.C. 371 (c)(3))
  - a. ☐ are attached hereto (required only if not communicated by the International Bureau).
  - b. ☐ have been communicated by the International Bureau.
  - c. ☐ have not been made; however, the time limit for making such amendments has NOT expired.
  - d. ☐ have not been made and will not be made.
8. ☐ An English language translation of the amendments to the claims under PCT Article 19 (35 U.S.C. 371(c)(3)).
9. ☒ An oath or declaration of the inventor(s) (35 U.S.C. 371 (c)(4)).
10. ☐ An English language translation of the annexes to the International Preliminary Examination Report under PCT Article 36 (35 U.S.C. 371 (c)(5)).
11. ☐ A copy of the International Preliminary Examination Report (PCT/IPEA/409).
12. ☒ A copy of the International Search Report (PCT/ISA/210).

Items 13 to 23 below concern document(s) or information included:

Supplemental

13. ☒ An Information Disclosure Statement under 37 CFR 1.97 and 1.98. **and copy of one reference**
14. ☐ An assignment document for recording. A separate cover sheet in compliance with 37 CFR 3.28 and 3.31 is included.
15. ☐ A **FIRST** preliminary amendment.
16. ☒ A **SECOND** or **SUBSEQUENT** preliminary amendment.
17. ☐ A substitute specification.
18. ☒ A power of attorney and/or change of address letter.
19. ☒ A computer-readable form of the sequence listing in accordance with PCT Rule 13ter.2 and 37 CFR 1.821 - 1.825.
20. ☐ A second copy of the published International Application under 35 U.S.C. 154(d)(4).
21. ☐ A second copy of the English language translation of the International Application under 35 U.S.C. 154(d)(4).
22. ☒ Express Mail Label No. **EV 417055361 US**
23. ☒ Other items or information:

- a. Response to Notification of Missing Requirements (in duplicate);
- b. Statement Under 37 CFR 3.73(b) and copy of unrecorded Assignment;
- c. Copy of Notification of Missing Requirements;
- d. Amended Paper Sequence Listing;
- e. Submission of Formal Drawings
- f. Six Sheets of Formal Drawings

U.S. APPLICATION NO (if known, see 37 CFR 1.5)		INTERNATIONAL APPLICATION NO.		ATTORNEY'S DOCKET NUMBER	
10/534,836		PCT/JP2003/014528		37404-78030	
The following fees are submitted:				CALCULATIONS	PTO USE
24. <input type="checkbox"/> Basic national fee				\$300	\$ \$0.00
25. <input type="checkbox"/> Examination fee					
If International preliminary examination report prepared by USPTO and all claims satisfy provisions of PCT Article 33(1)-(4).				\$100	\$ \$0.00
All other situations.				\$200	
26. <input type="checkbox"/> Search fee					
Search fee (37 CFR 1.445(a)(2)) has been paid on the international application to the USPTO as an International Searching Authority				\$100	
International Search Report prepared and provided to the Office				\$400	
All other situations.				\$500	\$ \$0.00
<b>TOTAL OF 24, 25 and 26 =</b>				<b>\$</b>	<b>\$0.00</b>
<input type="checkbox"/> Additional fee for specification and drawings filed in paper over 100 sheets (excluding sequence listing or computer program listing filed in an electronic medium). The fee is \$250 for each additional 50 sheets of paper or fraction thereof.					
Total Sheets	Extra Sheets	Number of each additional 50 or fraction thereof (round up to a whole number)	RATE		
- 100 =	0 /50 =	0	x \$250.00	\$	\$0.00
Surcharge of \$130.00 for furnishing the oath or declaration later than months from the earliest claimed priority date (37 CFR 1.492(e)).				\$	PAID 13 May 2005
CLAIMS	NUMBER FILED	NUMBER EXTRA	RATE		
Total claims	- 20 =	0	x \$50.00	\$	\$0.00
Independent claims	- 3 =	0	x \$200.00	\$	\$0.00
MULTIPLE DEPENDENT CLAIMS (if applicable) <input type="checkbox"/> + \$360.00				\$	\$0.00
<b>TOTAL OF ABOVE CALCULATIONS =</b>				<b>\$</b>	<b>\$0.00</b>
<input type="checkbox"/> Applicant claims small entity status. See 37 CFR 1.27. The fees indicated above are reduced by 1/2.				\$	\$0.00
<b>SUBTOTAL =</b>				<b>\$</b>	<b>\$0.00</b>
Processing fee of \$130.00 for furnishing the English translation later than 30 months from the earliest claimed priority date (37 CFR 1.492(f)).				\$	\$0.00
<b>TOTAL NATIONAL FEE =</b>				<b>\$</b>	<b>\$0.00</b>
Fee for recording the enclosed assignment (37 CFR 1.21(h)). The assignment must be accompanied by an appropriate cover sheet (37 CFR 3.28, 3.31). \$40 per property				\$	\$0.00
<b>TOTAL FEES ENCLOSED =</b>				<b>\$</b>	<b>\$0.00</b>
				Amount to be	\$
				Amount to be	\$

a. ☐ A check in the amount of \$ \_\_\_\_\_ to cover the above fees is enclosed.

b. ☐ Please charge my Deposit Account No. \_\_\_\_\_ in the amount of \_\_\_\_\_ to cover the above fees. A duplicate copy of this sheet is enclosed.

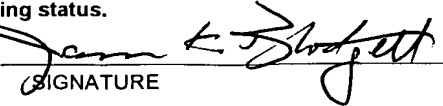
c. ☒ The Director is hereby authorized to charge any additional fees which may be required, or credit any overpayment to Deposit Account No. 10-0435. A duplicate copy of this sheet is enclosed.

d. ☐ Fees are to be charged to a credit card. **WARNING:** Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.

**NOTE:** Where an appropriate time limit under 37 CFR 1.495 has not been met, a petition to revive (37 CFR 1.137(a) or (b)) must be filed and granted to restore the International Application to pending status.

SEND ALL CORRESPONDENCE TO:

**ADDISON, Bradford G.**  
**BARNES & THORNBURG LLP**  
11 South Meridian Street  
Indianapolis, IN 46204  
US Customer No. 23643

  
SIGNATURE  
**James K. BLODGETT, February 16, 2006**  
NAME  
**48480**  
REGISTRATION NUMBER

BARNES & THORNBURG LLP

11 South Meridian Street  
Indianapolis, Indiana 46204  
(317) 236-1313  
(317) 231-7433 Fax

IN THE UNITED STATES PATENT OFFICE

<i>Earliest Priority Date:</i>	15 November 2002 (15.11.02)	}
		}
		}
<i>International Serial No.:</i>	PCT/JP2003/014528	}
		}
		}
<i>U.S. Serial No.:</i>	10/534,836	}
		}
<i>Invention:</i>	EXON 1 $\beta$ OF PDGF RECEPTOR $\alpha$ GENE AND UTILIZATION THEREOF	}
		}
<i>Applicant:</i>	IMOTO, Masaya; MINATO, Yusuke; TASHIRO, Etsu	}
		}
<i>International Filing Date:</i>	14 November 2003 (14.11.03)	}
		}
		}
<i>Attorney Docket:</i>	37404-78030	}
		}

**CERTIFICATE UNDER 37 C.F.R. § 1.10**

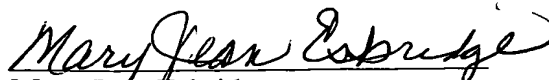
MAIL STOP PCT  
Attention: DO/EO/US  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA. 22313-1450

Sir:

Express Mail" Mailing Label No.: EV 417055361 US

Date of Deposit: 16 February 2006 (16.02.06)

I hereby certify that this paper or fee is being deposited with the United States Postal Service's "Express Mail Post Office to Addressee" service under 37 CFR 1.10 on the date indicated above and is addressed to Commissioner for Patents, P.O. Box 1450, Alexandria, VA. 22313-1450.

  
Mary Jean Eskridge

Indianapolis, Indiana  
(317) 231-7303

BARNES & THORNBURG LLP

11 South Meridian Street  
Indianapolis, Indiana 46204  
(317) 236-1313  
(317) 231-7433 Fax

IN THE UNITED STATES PATENT OFFICE

*Earliest Priority Date:* 15 November 2002 (15.11.02)

*International Serial No.:* PCT/JP2003/014528

*U.S. Serial No.:* 10/534,836

*Invention:* EXON 1 $\beta$  OF PDGF RECEPTOR  $\alpha$  GENE AND UTILIZATION THEREOF

*Applicant:* IMOTO, Masaya; MINATO, Yusuke; TASHIRO, Etsu

*International Filing Date:* 14 November 2003 (14.11.03)

*Attorney Docket:* 37404-78030

Certificate Under 37 CFR 1.10

Express Mail No.: EV417055361US

Date of Mailing: 16 February 2006

I hereby certify that this correspondence is being deposited with the United States Postal Service's "Express Mail Post Office to Addressee" service under 37 CFR 1.10 on the date above and is addressed to the Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

Mary Jean Eskridge  
(Signature)

Mary Jean Eskridge  
(Typed or Printed Name of Person Mailing Paper or Fee)

**RESPONSE TO NOTIFICATION OF MISSING REQUIREMENTS  
UNDER 35 U.S.C. 371 IN THE UNITED STATES  
DESIGNATED/ELECTED OFFICE (DO/EO/US)**

Attn: DO/EO/US  
Mail Stop: PCT  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

In response to the Notification of Missing Requirements Under 35 U.S.C. 371 in the United States Designated/Elected Office (DO/EO/US) mailed 16 December 2005 (16.12.05), applicants submit herewith:

1. original Declaration for Utility or Design Patent Application (37 CFR 1.63) signed, dated, and completed by each inventor;
2. copy of Power of Attorney to Prosecute Applications Before the USPTO;
3. original Statement Under 37 CFR 3.73(b) with copy of unrecorded Assignment;
4. copy of Notification of Missing Requirements Under 35 U.S.C. 371 in the United States Designated/Elected Office (DO/EO/US);
5. Diskette containing an amended Sequence Listing in computer readable form (PatentIn Ver. 3.3);
6. paper copy of the amended Sequence Listing; and
7. Relevant Statement.

The surcharge fee of \$65.00 for furnishing the oath or declaration later than 30 months from the earliest claimed priority date was paid on 13 May 2005 (13.05.05) with the lodging of the national papers.

Please replace the written "Sequence Listing" previously submitted with the national lodging on 13 May 2005, with the amended Sequence Listing submitted concurrently herewith. The content of the paper copy and the disk copy of the amended Sequence Listing, submitted in accordance with 37 C.F.R. § 1.821(c) and (e), respectively, are identical.

The Amendments in the Sequence Listing include the following:

- 1) On line <110> for Applicant name, the names of the inventors (IMOTO, Masaya; MINATO, Yusuke; and TASHIRO, Etsu) have been included in place of "KEIO UNIVERSITY."
- 2) On line <120> for Title of invention, "EXON 1 BETA OF PDGF RECEPTOR ALPHA GENE AND USE THEREOF" has been included in place of "PDGF receptor alpha gene exon1 beta and its use."
- 3) On line <130> for File reference, our docket number, "37404-78030," has been included in place of "PCT/711."
- 4) On new line <140> for Current patent application, "10/534,836" has been included.

5) On new line <141> for Current filing date, "2005-05-13" has been included.

6) On additional line <150> for Earlier patent application, "PCT/JP03/014528" has been included.

7) On additional line <151> for Earlier application filing date, "2003-11-14" has been included.

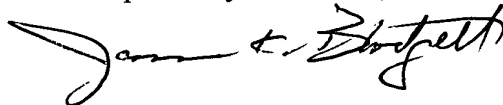
8) For sequence ID number 1, lines <220> and <223>, the latter of which had listed inventors Imoto, Masaya; Minato, Yusuke; and Tashiro, Etsu, have been deleted.

9) On lines <223> for sequence ID numbers 3-8, "Description of Artificial Sequence: Synthetic..." has been included.

The amended Sequence Listing, submitted herewith in accordance with 37 C.F.R. § 1.821(g), does not include new matter. Applicants believe that the requirements under 37 CFR §§ 1.821 - 1.825 have been met.

It is believed that no fee is due for submission of the amended Sequence Listing in computer readable form. However, the Commissioner is hereby authorized to charge any additional fees which may be required, or credit any overpayment, to Deposit Account No. 10-0435, referencing attorney docket no. 37404-78030. A duplicate of this Response is enclosed.

Respectfully submitted,



James K. BLODGETT  
Reg. No. 48480  
Agent for Applicants

JKB/mje/788373v1  
Indianapolis, Indiana 46204  
(317) 231-7401

Attachments: 7 as stated above



## UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

U.S. APPLICATION NUMBER NO.	FIRST NAMED APPLICANT	ATTY. DOCKET NO.
10/534,836	Masaya IMOTO	37404-78030

INTERNATIONAL APPLICATION NO.

PCT/JP03/14528

I.A. FILING DATE	PRIORITY DATE
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11/14/2003

11/15/2002

23643

BARNES & THORNBURG  
11 SOUTH MERIDIAN  
INDIANAPOLIS, IN 46204

RECEIVED

DEC 20 2005

BARNES &amp; THORNBURG LLP

CONFIRMATION NO. 8924

371 FORMALITIES LETTER



\*OC000000017669891\*

Date Mailed: 12/16/2005

### NOTIFICATION OF MISSING REQUIREMENTS UNDER 35 U.S.C. 371 IN THE UNITED STATES DESIGNATED/ELECTED OFFICE (DO/EO/US)

The following items have been submitted by the applicant or the IB to the United States Patent and Trademark Office as a Designated / Elected Office (37 CFR 1.495).

- Indication of Small Entity Status
- Copy of the International Application filed on 05/13/2005
- English Translation of the IA filed on 05/13/2005
- Copy of the International Search Report filed on 05/13/2005
- Preliminary Amendments filed on 05/13/2005
- Information Disclosure Statements filed on 05/13/2005
- U.S. Basic National Fees filed on 05/13/2005
- Priority Documents filed on 05/13/2005

DOCKETED

FOR MR/RES

BY MR E

DATE 10/20/05

ONE BY

3005

The following items **MUST** be furnished within the period set forth below in order to complete the requirements for acceptance under 35 U.S.C. 371:

- Oath or declaration of the inventors, in compliance with 37 CFR 1.497(a) and (b), identifying the application by the International application number and international filing date.
- This application clearly fails to comply with the requirements of 37 CFR. 1.821-1.825. Applicant's attention is directed to the final rulemaking notice published at 55 FR 18230 (May 1, 1990), and 1114 OG 29 (May 15, 1990). If the effective filing date is on or after July 1, 1998, see the final rulemaking notice published at 63 FR 29620 (June 1, 1998) and 1211 OG 82 (June 23, 1998). If the effective filing date is on or after September 8, 2000, see the final rulemaking notice published in the Federal Register at 65 FR 54604 (September 8, 2000) and 1238 OG 145 (September 19, 2000). Applicant must provide an initial computer readable form (CRF) copy of the "Sequence Listing", an initial paper or compact disc copy of the "Sequence Listing", **as well as an amendment specifically directing its entry into the application.** Applicant must also provide a statement that the content of the sequence listing information recorded in computer readable form is identical to the written (on paper or compact disc) sequence listing and, where applicable, includes no new matter, as required by 37 CFR 1.821(e), 1.821(f), 1.821(g), 1.825(b), or 1.825

(d). If applicant desires the sequence listing in the instant application to be identical with that of another application on file in the U.S. Patent and Trademark Office, such request in accordance with 37 CFR 1.821(e) may be submitted in lieu of a new CRF.

- A copy of the "Sequence Listing" in computer readable form has not been submitted as required by 37 CFR 1.821(e). If the effective filing date is on or after September 8, 2000, see the final rulemaking notice published in the Federal Register at 65 FR 54604 (September 8, 2000) and 1238 OG 145 (September 19, 2000). Applicant must provide an initial computer readable form (CRF) copy of the "Sequence Listing" and a statement that the content of the sequence listing information recorded in computer readable form is identical to the written (on paper or compact disc) sequence listing and, where applicable, includes no new matter, as required by 37 CFR 1.821(e), 1.821(f), 1.821(g), 1.825(b), or 1.825(d). If applicant desires the sequence listing in the instant application to be identical with that of another application on file in the U.S. Patent and Trademark Office, such request in accordance with 37 CFR 1.821(e) may be submitted in lieu of a new CRF.

**ALL OF THE ITEMS SET FORTH ABOVE MUST BE SUBMITTED WITHIN TWO (2) MONTHS FROM THE DATE OF THIS NOTICE OR BY 32 MONTHS FROM THE PRIORITY DATE FOR THE APPLICATION, WHICHEVER IS LATER. FAILURE TO PROPERLY RESPOND WILL RESULT IN ABANDONMENT.**

The time period set above may be extended by filing a petition and fee for extension of time under the provisions of 37 CFR 1.136(a).

Applicant is cautioned that correction of the above items may cause the specification and drawings page count to exceed 100 pages. If the specification and drawings exceed 100 pages, applicant will need to submit the required application size fee.

**For questions regarding compliance to 37 CFR 1.821-1.825 requirements, please contact:**

- **For Rules Interpretation, call (571) 272-0951**
- **For Patentin Software Program Help, call Patent EBC at 1-866-217-9197 or directly at 703-305-3028 / 703-308-6845 between the hours of 6 a.m. and 12 midnight, Monday through Friday, EST.**
- **Send e-mail correspondence for Patentin Software Program Help @ [ebc@uspto.gov](mailto:ebc@uspto.gov)**

Applicant is reminded that any communications to the United States Patent and Trademark Office must be mailed to the address given in the heading and include the U.S. application no. shown above (37 CFR 1.5)

*A copy of this notice **MUST** be returned with the response.*

FRANCINE YOUNG

Telephone: (703) 308-9140 EXT 215

**PART 1 - ATTORNEY/APPLICANT COPY**

U.S. APPLICATION NUMBER NO.	INTERNATIONAL APPLICATION NO.	ATTY. DOCKET NO.
10/534,836	PCT/JP03/14528	37404-78030



11 South Meridian Street  
Indianapolis, Indiana 46204  
(317) 236-1313  
(317) 231-7433 Fax

## IN THE UNITED STATES PATENT OFFICE

*Earliest Priority Date:* 15 November 2002 (15.11.02)  
*International Serial No.:* PCT/JP2003/014528  
*U.S. Serial No.:* 10/534,836  
*Invention:* EXON 1 $\beta$  OF PDGF RECEPTOR  $\alpha$  GENE AND UTILIZATION THEREOF  
*Applicant:* IMOTO, Masaya; MINATO, Yusuke; TASHIRO, Etsu  
*International Filing Date:* 14 November 2003 (14.11.03)  
*Attorney Docket:* 37404-78030

Certificate Under 37 CFR 1.10

Express Mail No.: EV417055361US

Date of Mailing: 16 February 2006

I hereby certify that this correspondence is being deposited with the United States Postal Service's "Express Mail Post Office to Addressee" service under 37 CFR 1.10 on the date above and is addressed to the Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

Mary Jean Eskridge  
(Signature)

Mary Jean Eskridge  
(Typed or Printed Name of Person Mailing Paper or Fee)

## SUBMISSION OF FORMAL DRAWINGS

Attention: DO/EO/US  
MAIL STOP PCT  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

Attached are six (6) sheets of formal drawings for the above-identified national application. These formal drawings, which replace any other drawings previously filed with this application, are the drawings that should be examined and printed with the issued patent.

Please charge any fees that may be due in connection with these drawings to our Deposit Account No. 10-0435, referencing our client/matter number 37404-78030.

Respectfully submitted,

James K. Blodgett  
James K. BLODGETT  
Reg. No. 48480  
Agent for Applicants

JKB/mje/788673v1  
Indianapolis, Indiana 46204  
(317) 231-7401

South Meridian Street  
Indianapolis, Indiana 46204  
(317) 236-1313  
(317) 231-7433 Fax

## IN THE UNITED STATES PATENT OFFICE

*Earliest Priority Date:* 15 November 2002 (15.11.02)

*International Serial No.:* PCT/JP2003/014528

*U.S. Serial No.:* 10/534,836

*Invention:* EXON 1 $\beta$  OF PDGF RECEPTOR  $\alpha$  GENE AND UTILIZATION THEREOF

*Applicant:* IMOTO, Masaya; MINATO, Yusuke; TASHIRO, Etsu

*International Filing Date:* 14 November 2003 (14.11.03)

*Attorney Docket:* 37404-78030

Certificate Under 37 CFR 1.10

Express Mail No.: EV417055361US

Date of Mailing: 16 February 2006

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Mary Jean Eskridge  
(Signature)

Mary Jean Eskridge  
(Typed or Printed Name of Person Mailing Paper or Fee)

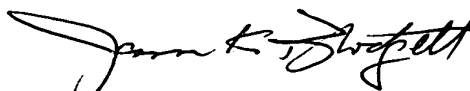
## RELEVANT STATEMENT REGARDING SEQUENCE LISTING

MAIL STOP PCT  
Attention: DO/EO/US  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA. 22313-1450

Sir:

Please accept the enclosed sequence listing on separate pages and a computer-readable copy of the sequence listing. The information recorded in computer-readable form is identical to the written sequence listing and no new matter has been added.

Respectfully submitted,



James K. BLODGETT  
Reg. No. 48480  
Agent for Applicants

JKB/mje/788774v1  
Indianapolis, Indiana 46204  
(317) 231-7401